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English in Indian Tongues: Investigating Articulatory Change and Phonetic Variation

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Abstract:

English plays a major role in India's academic and socio-economic life, but the way it is spoken shifts noticeably from region to region because of the influence of local languages. This study explores how English is articulated by Gujarati convent school teachers, all of whom speak Gujarati as their first language. By examining spoken samples from twenty teachers at both segmental and suprasegmental levels, the study identifies consistent patterns such as the substitutions /θ/→/t/, /ð/→/d/, /v/→/w/, /ʒ/→/dʒ/, along with clear vowel centralisation. Suprasegmental traits, including a syllable-timed rhythm, stress placed on the initial syllable, and rising intonation even in declarative sentences further highlight the influence of Gujarati. These findings show that these features form a stable, intelligible regional variety of Gujarati English. The study suggests that pronunciation training focused on intelligibility can support teachers in communicating more effectively in the classroom while still valuing their regional linguistic identity.

Introduction

English holds a special and increasingly empowering place in India.. It works as a link language, the medium of much academic work, and a key path to higher education and professional growth. In Gujarat, most people learn English only after they have fully mastered Gujarati, their mother tongue. In this setting, convent schools often viewed as institutions with strong language and teaching standards play an especially important role. Students rely heavily on the spoken English of their teachers, which becomes the main model they hear every day. As a result, the way teachers speak can strongly shape how generations of students eventually pronounce English. The influence of Gujarati on the English spoken in Gujarat is natural and systematic. Gujarati has its own sound patterns, rhythm, stress rules, and intonation. When Gujarati speakers shift into English, these features naturally carry over, creating predictable patterns rooted in their first language. Importantly, these patterns should not be seen as mistakes. Instead, they reflect the development of a regional, meaningful, and consistent variety of Indian English one shaped by local linguistic, cultural, and

educational realities. This study closely examines both the segmental features (such as consonants, vowels, and diphthongs) and the suprasegmental features (such as stress, rhythm, and intonation) used by convent-school teachers in Gujarat. The goal is not to compare their speech to native-speaker norms, but to understand its internal logic, clarity, and its role in shaping Gujarati English as a valid and contextually grounded variety of English.

2. Literature Survey

Research on Indian English phonetics has grown into a detailed and multifaceted field almost like a web of overlapping accents, regional backgrounds, and social influences. This complexity is expected, given India's immense linguistic diversity. Rather than existing as a single, uniform variety, Indian English varies widely depending on a speaker's region, education level, and especially the phonological features of their first language. Early scholars such as Bansal (1964, 1980) and Balasubramanian (1981, 2017) were among the first to point out that mother-tongue influence (MTI) is not just common but deeply woven into how Indian English sounds. Importantly, they did not treat these features as "mistakes." Instead, they viewed them as natural and systematic extensions of a speaker's L1 phonology into English an approach that has shaped much of the research that followed.When studies focus on specific linguistic communities, the phonetic picture becomes even richer. For example, Tamil English often replaces /f/ with /p^h/, shows limited aspiration, and frequently simplifies or monophthongizes diphthongs (Soundararaj, 1998). Telugu English presents similar diphthong reduction along with centralization of vowels (Prabhakar Babu, 1974). Urdu English incorporates retroflex consonants and maintains rhythmic patterns influenced by Urdu's more syllable-timed prosody (Asif Shuja, 1995). Malayalam English also shows front-vowel centralization (Syamala, 1992), while Punjabi English features distinctive aspiration patterns and a relatively stronger rhoticity (Kaur & Gill, 2013). Together, these studies demonstrate how regional phonologies give each Indian English sub-variety its own acoustic identity. Despite this extensive work across many linguistic groups, Gujarati English remains notably under-researched. The few existing studies such as Patel (2007) and Trivedi (2016) mostly address lexical or pedagogical issues rather than offering detailed phonetic descriptions. This gap is significant, especially considering the key role teachers play in shaping how learners hear and acquire English. In many classrooms, teachers provide the main and sometimes the only spoken model for students, meaning their phonetic habits directly influence learners' own speech. To address this gap, the present study investigates both the segmental and suprasegmental features of Gujarati English as spoken by school teachers in real classroom settings. By considering both linguistic patterns and educational contexts, the study adds to a fuller understanding of the phonetic diversity within Indian English.

3. Methodology

3.1 Participants

This study drew on a purposive group of twenty in-service teachers working in convent schools across urban regions of Gujarat. The participants, fourteen women and six

men, were between 26 and 48 years old. All of them were native Gujarati speakers who regularly used English as their main medium of classroom instruction. Their teaching experience ranged from 3 to 22 years, offering a mix of early
career, mid-career, and highly experienced educators. This diversity strengthened the study by capturing phonological patterns shaped by different levels of linguistic exposure and teaching practice.

3.2 Instruments for Data Collection

To develop a well-rounded phonetic profile, the study used three complementary tools:

Phonetic Word List: A carefully chosen list of fifty English words was used to elicit clear and controlled pronunciation of various segmental features, including consonant contrasts, monophthongs, and diphthongs.

Reading Passage: A neutral, coherent reading passage was used to observe connected-speech features such as vowel reduction, weak forms, linking, assimilation, and suprasegmental elements. This helped capture phonological processes that naturally occur during extended reading.

Spontaneous Classroom Discourse: Natural classroom interactions were recorded unobtrusively to collect spontaneous speech. These samples offered insight into authentic prosody, rhythm, intonation, and teaching-related speech patterns in real instructional settings.

Together, these three data types controlled, semi-controlled, and spontaneous provided strong methodological triangulation for a detailed phonetic analysis.

3.3 Recording Procedure

All recordings were made in each teacher's usual classroom setting to maintain ecological validity and reduce changes in speech caused by observation. High-quality digital audio equipment ensured clear recordings for analysis. Each teacher completed three sessions lasting about 5 to 7 minutes, providing consistent samples and reducing the chance of temporary performance variations. All speech samples were later transcribed using the International Phonetic Alphabet (IPA) following standard conventions.

3.4 Analytical Framework

The analysis used Received Pronunciation (RP) only as a reference point, not as a standard to be followed. This allowed a clear comparison that highlighted features of Gujarati-influenced English without making value judgments. The analysis focused on Segmental differences from RP, Patterns of vowel merger and centralization, Diphthong reduction or monophthongisation, Stress patterns at both word and sentence levels, Rhythmic timing and syllable duration, Intonation patterns across different discourse types. The goal was descriptive and interpretive: to document notable phonological features in the speech of Gujarati-medium teachers.

3.5 Ethical Considerations

The study followed strict ethical guidelines. All participants provided informed consent, and their identities and school names were anonymised. Data were securely stored

and used only for academic purposes. No identifying details appear in the transcriptions, analysis, or reporting.

4. Results and Data Analysis

The speech patterns of the twenty Gujarati L1 convent-school teachers were examined using a detailed phonetic and phonological approach, separating the analysis into two key areas: how individual sounds were produced (like consonants, vowels, and diphthongs) and how broader features such as stress, rhythm, and intonation were handled. Each difference from standard English pronunciation was carefully identified, labeled, counted, and then interpreted in light of how the speakers' first language influences their English, how Gujarati sound patterns work, and what these differences might mean for clear communication in the classroom.

4.1 Consonant Deviations

Clear and predictable patterns appeared across all speakers, showing how their first language shaped the way they produced certain English consonants. Because Gujarati does not include several sounds that English relies on, speakers tended to substitute these unfamiliar sounds with the closest ones available in Gujarati. The following patterns were found most frequently: /θ/ pronounced as /t/ (17 teachers),/ð/ pronounced as /d/ (16 teachers), /v/ pronounced as /w/ (12 teachers)/ʒ/ pronounced as /dʒ/ (9 teachers), /ŋ/ pronounced as /ng/ (11 teachers), English /r/ consistently produced as a trilled /r/ (20 teachers).These substitutions are not random mistakes; they reflect how Gujarati sound rules shape the way speakers approach English. Since Gujarati doesn't have the interdental fricatives /θ/ and /ð/, speakers naturally replace them with dental or alveolar stops, leading to pronunciations like "tink" instead of "think" and "dis" instead of "this." This is a common pattern across many languages where missing fricatives are replaced by stops. The replacement of /v/ with /w/ comes from the fact that Gujarati does not strongly distinguish between these two sounds. The shift from /ʒ/ to /dʒ/ follows the same logic: Gujarati includes the affricate /dʒ/ but not the fricative /ʒ/, so speakers default to what their language already provides. All teachers in the study used a trilled /r/, which is standard in Gujarati but very different from the English /ɹ/. This shows how deeply rooted the Gujarati rhotic is and why adopting the English version can be especially difficult (see figure 1). Taken together, these consonant patterns demonstrate how strongly the first language shapes English pronunciation and highlight the specific challenges Gujarati-speaking teachers may face when producing English sounds that do not exist in their native phonological system.

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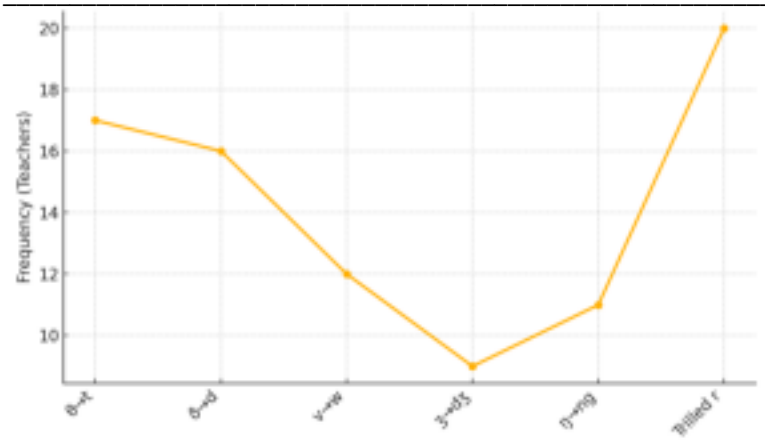

Figure1: Consonant Deviations

4.2 Vowel and Diphthong Deviations

Gujarati has a smaller and less detailed vowel system than English, so teachers who speak Gujarati often replace several English vowels with just one Gujarati sound. Since Gujarati doesn't have true diphthongs, English diphthongs also tend to get simplified into single vowels, showing a broader pattern of centralising vowels and reducing the glide between sounds. The common shifts found were: /æ/ → /a/ (14 teachers), /ɜː/ → /ər/ (15 teachers), /ɒ/, /ɔː/ → /o/ (18 teachers), /eɪ/ → /e/ (13 teachers), /əʊ/ → /o/ (16 teachers) /aɪ/ → /aː/ or a simpler monophthong (11 teachers). These shifts point to the effects of Gujarati's more limited vowel space, which tends to merge distinctions that are important in English (see figure 1 (b). A clear example is the merging of /ɒ/ and /ɔː/ into /o/, which reflects the fact that Gujarati does not contrast rounded mid-back vowels. This pattern shows how the sound system of a teacher's first language shapes their English pronunciation and may influence how students learn English vowel contrasts.

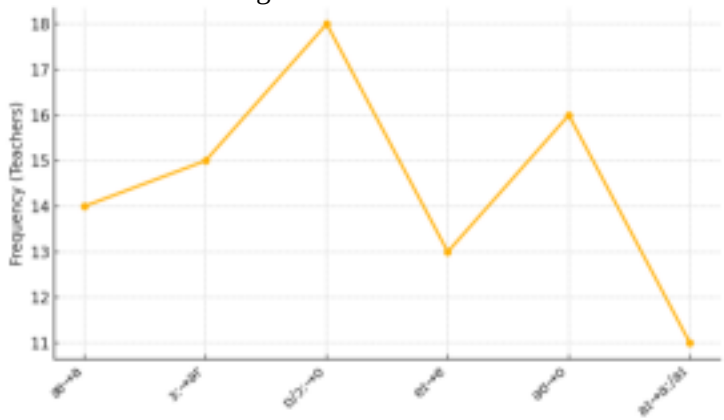

Figure 2: Vowel & Diphthong Deviations

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4.3 Suprasegmental Deviations

The suprasegmental features showed the strongest and most consistent influence of Gujarati on the teachers' English speech. Because Gujarati is a syllable-timed language, where each syllable receives roughly equal timing, it contrasts sharply with the stress-timed rhythm of English. As a result, many speakers produced English with even syllable timing, little vowel reduction, and predictable stress patterns. Several prosodic tendencies appeared repeatedly: A mainly syllable-timed rhythm (20 teachers), A strong preference for stressing the first syllable of words (19 teachers), Rising intonation patterns even in statements (17 teachers), A weaker distinction between stressed and unstressed syllables (18 teachers)
Together, these traits form a recognizable prosodic pattern typical of Gujarati-influenced English. The rising intonation on declarative sentences is especially noticeable, as it can make statements sound like questions to listeners who are not familiar with this variety(see figure1(c)). Overall, these patterns illustrate how the rhythm and intonation of a first language shape the way bilingual speakers produce a second language.

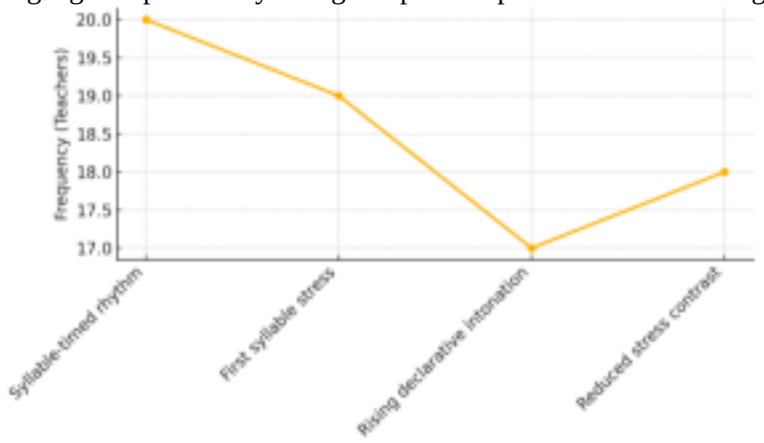

Figure 3: Suprasegmental Deviations

The results of this study show that the English spoken by convent-school teachers in Gujarat forms a stable and internally consistent phonological system shaped by the influence of Gujarati. Instead of being random or isolated pronunciation "mistakes," these patterns reflect a systematic process in which features from the speakers' first language guide how English sounds are produced. This supports earlier research on Indian English varieties, which emphasizes their rule-governed nature.At the level of individual sounds, the common substitutions of the interdental fricatives (/θ/→/t/, /ð/→/d/) match the well-known absence of these sounds in Gujarati. Speakers naturally choose the closest sounds available in their own language, which leads to stop-like pronunciations that fit comfortably within Gujarati sound patterns. The shift from /ʒ/ to /dʒ/ shows a similar tendency, highlighting Gujarati's preference for affricated sounds and demonstrating that these substitutions are guided by the structure of the first language rather than random choice.Vowel patterns also show clear restructuring. The merging of English /ɒ/ and /ɔː/ into a single /o/ sound reflects the lack of

contrast in this part of the vowel system in Gujarati. This suggests that speakers map English vowels onto fewer native categories, reducing distinctions that are not meaningful in Gujarati. Likewise, the centralization and simplification of English diphthongs show how Gujarati speakers adapt English's more complex vowel system into a shape that fits their own language's patterns. The suprasegmental features are especially notable. Gujarati's syllable-timed rhythm with even syllable lengths and limited vowel reduction appears clearly in the teachers' English. Stress becomes less contrastive and more predictable, mirroring Gujarati rather than the stress-timed rhythm found in many standard English varieties. In addition, the frequent use of rising intonation at the end of statements, a characteristic feature of Gujarati, carries over into their English and creates a distinctive melodic pattern. Taken together, these findings support the view that Indian English varieties should be understood as legitimate linguistic systems shaped by systematic interactions between first and second languages. The teachers' speech is not simply the result of incomplete learning of "native" English norms; it represents a stable and coherent phonological variety with its own internal logic. This reinforces the broader sociolinguistic understanding that Indian English is a nativized and contextually grounded variety shaped by multilingual environments rather than a departure from external standards.

4. Conclusion

The study concludes that teachers from selected convent schools in Gujarat display clear and consistent phonetic patterns influenced by Gujarati phonology. Rather than hindering communication, these features form a stable and easily understandable variety of Indian English. The findings suggest that, with an intelligibility-oriented approach to pronunciation, teachers can further enhance their spoken communication while confidently maintaining their linguistic identity.

References

Joshi, P. (2014). Phonological contrastive analysis of consonant and vowel phonemes of RP and GIE with special focus on Gujarati phonology. ELT Voices, 4(6), 11–19.

Wiltshire, C. R., & Harnsberger, J. D. (2006). The influence of Gujarati and Tamil L1s on Indian English: A preliminary study. Journal of English Linguistics, 34(2), 92–112.

Shastri, S. V. (1999). Pronunciation problems of Gujarati learners of English. Journal of the

Gujarat English Teachers' Association, 12(3), 45–52.
Patel, D. (2017). A study of segmental deviations in Gujarati-accented English among tertiary-level learners. International Journal of English Language Teaching, 5(2), 25–34.
Patel, H. (2015). Influence of Gujarati phonology on English stress patterns in ESL learners. Journal of Indian Linguistics, 76(1–2), 89–102.
Abercrombie, D. (1967). Elements of general phonetics. Edinburgh University Press.
Balasubramanian, T. (1981). A textbook of English phonetics for Indian students. Macmillan. 8. Balasubramanian, T. (2017). English phonetics for Indian students (2nd ed.). Macmillan.
Bansal, R. K. (1964). The intelligibility of Indian English. Central Institute of English.
Bansal, R. K., & Harrison, J. B. (1972). Spoken English for India. Orient Longman.
Catford, J. C. (1988). A practical introduction to phonetics. Oxford University Press.
Crystal, D. (2008). A dictionary of linguistics and phonetics (6th ed.). Wiley-Blackwell.
Dasgupta, P. (2002). Indian English phonology. In R. Mesthrie (Ed.), Language in South Asia (pp. 91–111). Cambridge University Press.
Derwing, T. M., & Munro, M. J. (2005). Second language accent and pronunciation teaching. TESOL Quarterly, 39(3), 379–397.
Deterding, D. (2013). Misunderstandings in English as a lingua franca. De Gruyter.
Flege, J. E. (1995). Second-language speech learning. Speech Communication, 16(1), 1–20.
Gimson, A. C. (1989). An introduction to the pronunciation of English (4th ed.). Edward Arnold. 18. Gimson, A. C., & Cruttenden, A. (2001). Gimson's pronunciation of English (6th ed.). Arnold.
Graddol, D. (2010). English Next India. British Council.
Jenkins, J. (2000). The phonology of English as an international language. Oxford University Press.
Jenkins, J. (2012). English as a lingua franca: Attitude and identity. Oxford University Press.
Kachru, B. B. (1992). The other tongue: English across cultures (2nd ed.). University of Illinois Press.
Kachru, Y., & Smith, L. (2008). Cultures, contexts, and world Englishes. Routledge.
Agnihotri, R. K., & Khanna, A. L. (1997). Problematizing English in India. Sage.
Best, C. T. (1995). A direct realist perspective on cross-language speech perception. In W. Strange (Ed.), Speech perception and linguistic experience (pp. 167–200). York Press.
Bolton, K. (2005). Where WE stands: Issues in the study of World Englishes. World Englishes, 24(1), 69–83. 27. Brown, A. (1990). Pronunciation models. Singapore University Press.
Carr, P. (2013). English phonetics and phonology: An introduction. Wiley-Blackwell.
Clark, J., Yallop, C., & Fletcher, J. (2007). An introduction to phonetics and phonology (3rd ed.). Wiley-Blackwell. 30. Crystal, D. (2003). English as a global language (2nd ed.). Cambridge University Press.

Flege, J. E., & Bohn, O.-S. (2021). Second language speech learning: Theoretical and empirical progress. Cambridge University Press.

Gargesh, R. (2004). Indian English: Phonology. In E. Schneider et al. (Eds.), A handbook of varieties of English (Vol.1, pp. 992–1002). Mouton de Gruyter.

Kirkpatrick, A. (2007). World Englishes. Cambridge University Press.

Ladefoged, P. (2001). Vowels and consonants. Blackwell.

Ladefoged, P., & Johnson, K. (2014). A course in phonetics (7th ed.). Cengage Learning.

Mauranen, A. (2012). Exploring ELF. Cambridge University Press.

Moyer, A. (2014). Second language accent. Cambridge University Press.

Munro, M. J., & Derwing, T. M. (1995). Foreign accent, comprehensibility, and intelligibility. Language Learning, 45(1), 73–97.

Nihalani, P., Tongue, R. K., & Hosali, P. (2004). Indian and British English (2nd ed.). Oxford University Press.